UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/990,039	11/20/2001	Mika Grundstrom	4208-4028	1500

27123	7590	10/05/2005		

MORGAN & FINNEGAN, L.L.P.
3 WORLD FINANCIAL CENTER
NEW YORK, NY 10281-2101

EXAMINER
SHAW, PELING ANDY

ART UNIT	PAPER NUMBER
2144	

DATE MAILED: 10/05/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)
	09/990,039	GRUNDSTROM, MIKA
	Examiner	Art Unit
	Peling A. Shaw	2144

-- *The MAILING DATE of this communication appears on the cover sheet with the correspondence address* --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE _3_ MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on _05/09/2003_.

2a)☐ This action is **FINAL.**   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) _1-110_ is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) _1-110_ is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on _20 November 2001_ is/are: a)☒ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All   b)☐ Some * c)☐ None of:

        1.☐ Certified copies of the priority documents have been received.

        2.☐ Certified copies of the priority documents have been received in Application No. _____.

        3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
    Paper No(s)/Mail Date _11/20/01, 05/09/03_.

4)☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____ .

5)☐ Notice of Informal Patent Application (PTO-152)

6)☐ Other: _____.

DETAILED ACTION

Priority

1.   This application has no priority claim made. The filing date is 11/20/2001.

Claim Rejections - 35 USC § 102

2.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the

basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

Claims 1-3, 5, 7-13, 15, 17-23, 25, 27-30, 63-64, 66, 68-72, 74, 76-80, 82 and 84-86 are

rejected under 35 U.S.C. 102(a) as being anticipated by Momirov (US 6216167 B1),

hereinafter referred as Momirov.

      a. Regarding claim 1, Momirov disclosed a method for constructing a data packet

         having both a payload segment that carries data associated with a link layer (MAC) or

         network layer (IP) address and a header segment that has one or more fields, the

         method comprising: generating an address value based on the IP or MAC address;

         formatting the address value; and populating the formatted address value into a field

         of the header that will be used as a selection criteria by a receiving terminal (Fig. 7;

         column 1, line 52-column 2, line 4; column 4, line 52-column 6, line 55; column 7,

         line 9-23; column 8, line 24-65; column 9, line 32-50).

      b. Regarding claim 2, Momirov disclosed the method according to claim 1 wherein the

         data packet is a multicast or unicast packet (column 1, line 52-column 2, line 4).

c. Regarding claim 3, Momirov disclosed the method according to claim 1 wherein the

    IP or MAC address is a multicast or unicast address (column 7, line 9-23; column 8,

    line 24-65).

d. Regarding claim 5, Momirov disclosed the method according to claim 1 wherein the

    address value is formatted in accordance with a protocol (column 1, line 52-column 2,

    line 4).

e. Regarding claim 7, Momirov disclosed the method according to claim 1 wherein the

    selection criteria comprises a subset of the IP or MAC address (column 7, line 9-23;

    column 8, line 24-65).

f. Regarding claim 8, Momirov disclosed the method according to claim 1 wherein the

    selection criteria comprises a subset of the IP or MAC address that has been operated

    upon by a bitwise logic function (column 10, line 27-column 11, line 8).

g. Regarding claim 9, Momirov disclosed the method according to claim 1 wherein the

    IP or MAC address, or a subset thereof, has been operated upon by a hashing function

    (column 2, line 14-52).

h. Regarding claim 10, Momirov disclosed the method according to claim 1 wherein the

    addition of a flag to indicate that the packet is part of a multicast data stream formats

    the address value (column 10, line 27-column 11, line 8).

i. Claims 11-13, 15, 17-23, 25, 27-30, 63-64, 66, 68-72, 74, 76-80, 82 and 84-86 are of

    the same scope as claims 1-3, 5 and 7-10. These are rejected for the same reasons as

    for claims 1-3, 5 and 7-10.

Momirov disclosed all limitations of claims 1-3, 5, 7-13, 15, 17-23, 25, 27-30, 63-64, 66, 68-

72, 74, 76-80, 82 and 84-86. Claims 1-3, 5, 7-13, 15, 17-23, 25, 27-30, 63-64, 66, 68-72, 74,

76-80, 82 and 84-86 are rejected under 35 U.S.C. 102(a).

3.   Claims 32-40, 42-50, 52-60, 88-93, 95-100 and 102-107 are rejected under 35

U.S.C. 102(a) as being anticipated by Momirov (US 6216167 B1), hereinafter referred as

Momirov.

   a. Regarding claim 32, Momirov disclosed a method for selecting a desired data packet

      from a plurality of data packets, where each packet is associated with an IP or MAC

      address, the method comprising: generating an expected value for a field in the header

      based on the IP or MAC address, where said field is used as selection criteria; and

      examining the field used as selection criteria in each packet of a plurality of incoming

      packets so as to identify packets that contain the expected value (Fig. 5 and 6; column

      1, line 52-column 2, line 4; column 4, line 52-column 6, line 55; column 7, line 9-23;

      column 8, line 24-65; column 8, line 66-column 9, line 31).

   b. Regarding claim 33, Momirov disclosed the method according to claim 32 wherein

      the data packet is a multicast or unicast packet (column 1, line 52-column 2, line 4).

   c. Regarding claim 34, Momirov disclosed the method according to claim 32 wherein

      the IP or MAC address is a multicast or unicast address (column 7, line 9-23; column

      8, line 24-65).

   d. Regarding claim 35, Momirov disclosed the method according to claim 32 wherein

      the IP or MAC address is determined from a table (abstract; column 7, line 9-23;

      column 8, line 24-65).

e. Regarding claim 36, Momirov disclosed the method according to claim 32 wherein the anticipated address value is determined solely from the IP or MAC address of the desired data stream (Fig. 5 and 6; column 7, line 9-23; column 8, line 24-65; column 8, line 66-column 9, line 31).

f. Regarding claim 37, Momirov disclosed the method according to claim 32 wherein the selection criteria comprises a subset of the IP or MAC address (column 7, line 9-23; column 8, line 24-65).

g. Regarding claim 38, Momirov disclosed the method according to claim 32 wherein the selection criteria comprises a subset of the IP or MAC address that has been operated upon by a bitwise logic function (column 10, line 27-column 11, line 8).

h. Regarding claim 39, Momirov disclosed the method according to claim 32 wherein the selection criteria comprises a subset of the IP or MAC address that has been operated upon by a hashing function (column 2, line 14-52).

i. Regarding claim 40, Momirov disclosed the method according to claim 32 wherein a flag value indicates that the packet is part of a multicast data stream (column 10, line 27-column 11, line 8).

j. Claims 42-50, 52-60, 88-93, 95-100 and 102-107 are of the same scope as claims 32-40. These are rejected for the same reasons as for claims 32-40.

Momirov disclosed all limitations of claims 32-40, 42-50, 52-60, 88-93, 95-100 and 102-107. Claims 32-40, 42-50, 52-60, 88-93, 95-100 and 102-107 are rejected under 35 U.S.C. 102(a).

Claim Rejections - 35 USC § 103

4.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or
> described as set forth in section 102 of this title, if the differences between the subject matter
> sought to be patented and the prior art are such that the subject matter as a whole would have
> been obvious at the time the invention was made to a person having ordinary skill in the art
> to which said subject matter pertains. Patentability shall not be negatived by the manner in
> which the invention was made.

Claims 4, 6, 14, 16, 24, 26, 65, 67, 73, 75, 81, 83 and 109 are rejected under 35 U.S.C. 103(a)

as being unpatentable over Momirov (US 6216167 B1), hereinafter referred as Momirov as

applied to claims 1-3 and 5 above, and further in view of Chauvel et al. (US 6226291 B1),

hereinafter referred as Chauvel.

   a.   Momirov shows (claim 1) a method for constructing a data packet having both a

        payload segment that carries data associated with a link layer (MAC) or network

        layer (IP) address and a header segment that has one or more fields, the method

        comprising: generating an address value based on the IP or MAC address; formatting

        the address value; and populating the formatted address value into a field of the

        header that will be used as a selection criteria by a receiving terminal (Fig. 7; column

        1, line 52-column 2, line 4; column 4, line 52-column 6, line 55; column 7, line 9-23;

        column 8, line 24-65; column 9, line 32-50); (claim 2) wherein the data packet is a

        multicast or unicast packet (column 1, line 52-column 2, line 4); (claim 3) wherein

        the IP or MAC address is a multicast or unicast address (column 7, line 9-23; column

        8, line 24-65); (claim 5) wherein the address value is formatted in accordance with a

        protocol (column 1, line 52-column 2, line 4). Claims 11, 13, 15, 21, 23 and 25 are of

the same scope as claims 1, 3 and 5. Claims 63, 66, 71, 74 and 79 are of the same

scope of claims 1-2 and 5. Momirov does not show (claim 4) wherein the packet is

part of a Motion Picture Expert Group-level 2 (MPEG2) transport stream; (claim 6)

wherein the protocol is MPEG2. However Momirov also shows (claim 4) wherein the

field that will be used as selection criteria comprises a one bit flag preceding the

address value, the 12 least significant bits of the IP or MAC address of the payload

(column 10, line 27-column 11, line 8).

b.   Chauvel shows (claim 4) wherein the packet is part of a Motion Picture Expert

Group-level 2 (MPEG2) transport stream (Fig. 5; column 4, line 47-column 5, line

22); (claim 6) wherein the protocol is MPEG2 (Fig. 5; column 4, line 47-column 5,

line 22) in an analogous art for the purpose of transport stream packet parser system.

c.   It would have been obvious to a person of ordinary skill in the art at the time of the

invention was made to modify Momirov's functions of efficient path based

forwarding and multicast forwarding with Chauvel transporting function explicitly for

MPEG2 application.

d.   The modification would have been obvious because one of ordinary skill in the art

would have been motivated to explicitly apply multicast functions over MAC or IP

for MPEG2 application as per Momirov and Chauvel's teaching.

e.   Claims 14, 16, 24, 26, 65, 67, 73, 75, 81 and 83 are of the same scope as claims 4 and

6. These are rejected for the same reasons as for claims 4 and 6.

f.   Claim 109 is of the same scope as claims 1-4. It is rejected for the same reasons as for

claims 1-4.

Together Momirov and Chauvel disclosed all limitations of claims 4, 6, 14, 16, 24, 26, 65,

67, 73, 75, 81, 83 and 109. Claims 4, 6, 14, 16, 24, 26, 65, 67, 73, 75, 81, 83 and 109 are

rejected under 35 U.S.C. 103(a).

5.   Claims 41, 51, 61, 94, 101, 108 and 110 are rejected under 35 U.S.C. 103(a) as being

unpatentable over Momirov (US 6216167 B1), hereinafter referred as Momirov as applied to

claims 32 and 33 above, and further in view of Chauvel et al. (US 6226291 B1), hereinafter

referred as Chauvel.

   a. Momirov shows (claim 32) a method for selecting a desired data packet from a

       plurality of data packets, where each packet is associated with an IP or MAC address,

       the method comprising: generating an expected value for a field in the header based

       on the IP or MAC address, where said field is used as selection criteria; and

       examining the field used as selection criteria in each packet of a plurality of incoming

       packets so as to identify packets that contain the expected value (Fig. 5 and 6; column

       1, line 52-column 2, line 4; column 4, line 52-column 6, line 55; column 7, line 9-23;

       column 8, line 24-65; column 8, line 66-column 9, line 31); (claim 33) wherein the

       data packet is a multicast or unicast packet (column 1, line 52-column 2, line 4).

       Momirov does not show (claim 41) wherein the packet is part of a Motion Picture

       Expert Group-level 2 (MPEG2) transport stream. Claims 42, 52, 88, 95 and 102 are of

       the same scope as claims 32 and 33. However Momirov also shows (claim 41)

       wherein the field that will be used as selection criteria is a one bit flag preceding the

       12 least significant bits of the IP or MAC address of the payload (column 10, line 27-

       column 11, line 8).

b. Chauvel shows (claim 41) wherein the packet is part of a Motion Picture Expert

Group-level 2 (MPEG2) transport stream in an analogous art for the purpose of

transport stream packet parser system.

c. It would have been obvious to a person of ordinary skill in the art at the time of the

invention was made to modify Momirov's functions of efficient path based

forwarding and multicast forwarding with Chauvel transporting function explicitly for

MPEG2 application.

d. The modification would have been obvious because one of ordinary skill in the art

would have been motivated to explicitly apply multicast functions over MAC or IP

for MPEG2 application as per Momirov and Chauvel's teaching.

e. Claims 51, 61, 94, 101 and 108 are of the same scope as claim 41. These are rejected

for the same reasons as for claim 41.

f. Claim 110 is of the same scope as claims 32-33 and 41. It is rejected for the same

reasons as for claims 32-33 and 41.

Together Momirov and Chauvel disclosed all limitations of claims 41, 51, 61, 94, 101, 108

and 110. Claims 41, 51, 61, 94, 101, 108 and 110 are rejected under 35 U.S.C. 103(a).

6.   Claim 31, 62 and 87 is rejected under 35 U.S.C. 103(a) as being unpatentable over

Momirov (US 6216167 B1), hereinafter referred as Momirov as applied to claims 1-2 and 32,

and further in view of Bigham et al. (US 5544161 A), hereinafter referred as Bigham.

a. Momirov shows (claim 1) a method for constructing a data packet having both a

payload segment that carries data associated with a link layer (MAC) or network

layer (IP) address and a header segment that has one or more fields, the method

comprising: generating an address value based on the IP or MAC address; formatting

the address value; and populating the formatted address value into a field of the

header that will be used as a selection criteria by a receiving terminal (Fig. 7; column

1, line 52-column 2, line 4; column 4, line 52-column 6, line 55; column 7, line 9-23;

column 8, line 24-65; column 9, line 32-50); (claim 2) wherein the data packet is a

multicast or unicast packet (column 1, line 52-column 2, line 4); (claim 32) a method

for selecting a desired data packet from a plurality of data packets, where each packet

is associated with an IP or MAC address, the method comprising: generating an

expected value for a field in the header based on the IP or MAC address, where said

field is used as selection criteria; and examining the field used as selection criteria in

each packet of a plurality of incoming packets so as to identify packets that contain

the expected value (Fig. 5 and 6; column 1, line 52-column 2, line 4; column 4, line

52-column 6, line 55; column 7, line 9-23; column 8, line 24-65; column 8, line 66-

column 9, line 31). Claim 21 is of the same scope as claim 1. Claim 52 is of the same

scope as claim 32. Claim 79 is of the same scope as claims 1-2. Momirov does not

show (claim 31) wherein the apparatus is a wireless handheld terminal (abstract;

column 32, line 8-21).

b. Bigham shows (claim 31) wherein the apparatus is a wireless handheld terminal

(abstract; column 32, line 8-21) in an analogous art for the purpose of ATM packet

demultiplexer for use in full service network having distributed architecture.

c. It would have been obvious to a person of ordinary skill in the art at the time of the

invention was made to modify Momirov's functions of efficient path based

forwarding and multicast forwarding with Bigham transporting function explicitly for

wireless personal data assistant.

d. The modification would have been obvious because one of ordinary skill in the art

would have been motivated to explicitly apply multicast functions over MAC or IP

wireless personal data assistant as per Momirov and Chauvel's teaching.

e. Claims 62 and 87 are of the same scope as claims 1-2 and 31-32. These are rejected

for the same reasons as for claims 1-2 and 31-32.

Together Momirov and Chauvel disclosed all limitations of claims 31, 62 and 87. Claims 31,

62 and 87 rejected under 35 U.S.C. 103(a).

Remarks

7.   The following pertaining arts are discovered and not used in this office action. Office reserves the right to use these arts in later actions.

    a. Wasilewski et al. (US 5870474 A) Method and apparatus for providing conditional access in connection-oriented, interactive networks with a multiplicity of service providers

    b. Slattery et al. (US 6064676 A) Remultipelxer cache architecture and memory organization for storing video program bearing transport packets and descriptors

    c. Mao et al. (US 6886178 B1) Digital TV system with synchronized world wide web content

    d. HAKULINEN (WO 97020413 A1) PACKET SWITCHING SYSTEM USING TELEPHONIC AND SATELLITE TRANSMISSION
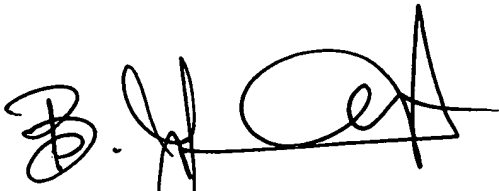
Conclusion

8.   The prior art made of record and not relied upon is considered pertinent to applicant's

disclosure. Refer to the enclosed PTO-892 for details.

.   Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Peling A. Shaw whose telephone number is (571) 272-7968. The

examiner can normally be reached on M-F 8:00 - 4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, David A. Wiley can be reached on (571) 272-3923. The fax phone number for the

organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the statu9s of an application may be obtained from the Patent

Application Information Retrieval (PAIR) system. Status information for published applications

may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

applications is available through Private PAIR only. For more information about the PAIR

system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR

system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

pas

BUNJOB JAROENCHONWANIT
PRIMARY EXAMINER